

**CLAIMS**

WHAT IS CLAIMED IS:

- 5    1. A dielectric barrier discharge lamp, having  
a discharge vessel which is filled with a discharge  
medium,  
at least one inner electrode, which is arranged on the  
inner side of the discharge vessel,
- 10    a dielectric layer on at least one inner electrode,  
which layer separates the inner electrode or inner  
electrodes from the discharge medium,  
at least one supply conductor, which is electrically  
conductively connected to the at least one inner  
15    electrode in a leadthrough region, which leadthrough  
region is realized by a gastight pinch.
- 20    2. The dielectric barrier discharge lamp as claimed  
in claim 1, in which the pinch completely surrounds the  
connection between the at least one inner electrode and  
the associated supply conductor.
- 25    3. The dielectric barrier discharge lamp as claimed  
in claim 1 or 2, in which the at least one inner  
electrode is realized as a conductor track arranged on  
the inner side of the wall of the discharge vessel.
- 30    4. The dielectric barrier discharge lamp as claimed  
in claim 1 or 2, in which the dielectric layer arranged  
on at least one inner electrode extends at least as far  
as the start of the pinch, and preferably partway into  
the pinch.
- 35    5. The dielectric barrier discharge lamp as claimed  
in claim 1 or 2, in which the at least one supply  
conductor is realized by an electrically conductive  
wire.

6. The dielectric barrier discharge lamp as claimed in claim 5, in which the diameter of the wire is in the range between 0.3 mm and 1.5 mm, preferably in the range between 0.5 mm and 1.0 mm.

5

7. The dielectric barrier discharge lamp as claimed in claim 5, in which the wire comprises an iron-nickel alloy.

10 8. The dielectric barrier discharge lamp as claimed in claim 1 or 2, in which the discharge vessel is tubular and the at least one inner electrode is linear, and in which the at least one inner electrode is oriented parallel to the longitudinal axis of the  
15 discharge vessel.

9. The dielectric barrier discharge lamp as claimed in claim 8, in which the inner electrodes are two in number, and in which these two inner electrodes are  
20 arranged diametrically.

10. The dielectric barrier discharge lamp as claimed in claim 9, in which the plane of the pinch lies in the common plane of the two inner electrodes.

25

11. The dielectric barrier discharge lamp as claimed in claim 1 or 2, in which the pinch additionally includes an exhaust tube.

30 12. The dielectric barrier discharge lamp as claimed in claim 1 or 2, in which the wall of the discharge vessel is at least partially provided with phosphor.

35 13. The dielectric barrier discharge lamp as claimed in claim 1 or 2, in which the discharge medium comprises xenon.